

CROWELL & MORING

1001 PENNSYLVANIA AVENUE, N.W.

WASHINGTON, D.C. 20004-2595

(202) 624-2500

CABLE: CROMOR

FACSIMILE (RAPICOM): 202-628-5116

W. U. I. (INTERNATIONAL) 64344

W. U. (DOMESTIC) 89-2448

RECEIVED

MAR 17 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

SUITE 1500
150 MAIN STREET
IRVINE, CALIFORNIA 92614-7217
(714) 263-8400
DENNING HOUSE
90 CHANCERY LANE
LONDON WC2A 1ED
44-71-413-0011
FACSIMILE 44-71-413-0333

March 17, 1995

BY HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W. Room 222
Washington, DC 20554

DOCKET FILE COPY ORIGINAL

RE: CC Docket No. 94-102, RM-8143

Dear Mr. Caton:

Transmitted herewith for filing with the Commission on behalf of Loral/QUALCOMM Partnership, L.P., are an original and nine copies of its "Reply Comments" in the above-captioned proceeding.

Should there be any questions regarding this matter, please communicate with this office.

Respectfully submitted,



William D. Wallace

Enclosures

cc: Alan Thomas
John A. Reed
Scott Blake Harris
Cecily Holiday
Tom Tycz
Fern Jarmulnek

No. of Copies rec'd
List ABCDE

49

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

ORIGINAL
RECEIVED

MAR 17 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)
)
Revision of the Commission's Rules)
to Ensure Compatibility with)
Enhanced 911 Emergency)
Calling Systems)
_____)

CC Docket No. 94-102

RM-8143

DOCKET FILE COPY ORIGINAL

To: The Commission

REPLY COMMENTS

Loral/QUALCOMM Partnership, L.P. ("LQP"), hereby submits its Reply Comments with regard to the "Notice of Proposed Rule Making" in the above-referenced docket.¹ LQP has been granted an authorization to construct, launch and operate a low-earth orbiting mobile-satellite system in the MSS Above 1 GHz Service,² and, therefore, has a substantial interest in the service requirements imposed upon wireless technologies. LQP agrees with the initial comments from the satellite industry in this docket that it is premature for the Commission to impose Enhanced 911 compatibility requirements on MSS systems at this time. Accordingly, for the reasons outlined in these parties' comments and below, LQP recommends that the Commission exclude MSS from the services on which such

¹ See Notice of Proposed Rule Making, FCC 94-237 (released Oct. 19, 1994) ("NPRM").

² See Order and Authorization, DA 95-128 (released Jan. 31, 1995).

requirements are imposed. Further consideration of this issue for MSS should be postponed until Enhanced 911 capabilities can be economically and reasonably accommodated on MSS systems and, for global MSS systems, until international emergency service standards have been adopted.

I. THE COMMISSION SHOULD FOLLOW THE RECOMMENDATIONS OF THE SATELLITE INDUSTRY AND NOT IMPOSE ENHANCED 911 COMPATIBILITY REQUIREMENTS ON MSS SYSTEMS AT THIS TIME.

Several representatives of the MSS industry responded to the Commission's request for comments (NPRM, at 17 n. 40) on whether the proposed Enhanced 911 compatibility requirements should be imposed on MSS systems.³ These parties universally recommend that the Commission not impose Enhanced 911 requirements on MSS systems for several reasons. LQP agrees.

First, MSS systems are in a relatively early stage of development, compared with terrestrial wireless systems, and it is therefore premature to mandate compliance with rules proposed primarily for terrestrial wireless technology. The proposed emergency calling capabilities are complex and expensive to implement and operate. Requiring compliance by MSS systems could hinder the rapid introduction of MSS services in the near future. As Constellation stated: "Given the current dynamic state of LEO MSS, to require 911 [compatibility] now may

³ See Comments of AMSC Subsidiary Corporation; Comments of COMSAT Corporation; Comments of Constellation Communications, Inc.; Comments of Motorola, Inc.; Comments of Orbital Communications Corporation ("Orbcomm"); Comments of Starsys Global Positioning, Inc.; and Comments of TRW Inc.

delay the introduction of this new technology by adding significant complexities to the system architecture and increase the cost of service to customers in areas where there is no basic communications service."⁴ The Commission has already recognized that LEO MSS systems will introduce new and enhanced services which will provide substantial public interest benefits.⁵ Accordingly, LQP urges the Commission not to impose requirements on MSS systems which may significantly delay introduction of this beneficial technology.

Second, compliance with the proposed Enhanced 911 services would be burdensome not only for system development but also for cost and performance of subscriber equipment. AMSC estimated that the cost of its user equipment would increase from \$500-\$1000 per mobile terminal if it were required to provide GPS capability.⁶ Orbcomm noted that addition of GPS capability to its NVNG system would increase the cost of user terminals by \$200-\$300, double their weight and reduce their battery life by approximately 90%.⁷ This economic burden would be passed on to consumers, making MSS less accessible and less likely to achieve the benefits currently available.

⁴ Constellation Comments, at 2.

⁵ See Report and Order, 76 RR 2d 202, ¶¶ 3-4 (1994).

⁶ See AMSC Comments, at 7; see also TRW Comments, at 7 ("Imposition of rigid E-911 interconnection and location information delivery protocols (such as ANI and ALI) is certain to be very expensive for a new satellite system, and is likely to be unduly costly").

⁷ Orbcomm Comments, at 4.

Third, the model of emergency call service proposed in the NPRM is generally inconsistent with the operation of MSS systems at this time. Emergency 911 calls require rapid identification of the public safety answering point ("PSAP") nearest to the caller and a local response. "The essence of the paradigm is local and proximate. Local emergencies demand local responses."⁸ However, LEO MSS systems are inherently global or national in service area; GLOBALSTAR would only have about 10 gateways in the United States to which incoming calls would be routed. While a PSAP may be designated for each area served by a gateway, it would be difficult in true emergencies to route the call to the PSAP closest to the caller. Moreover, changes to the call processing and routing capabilities of MSS systems may require substantial redesign, which would in turn increase costs and potentially delay initiation of service.⁹ Given the available technology, it makes little sense for callers to use MSS systems for localized emergencies, and, therefore, MSS systems should not be burdened with the requirements proposed for terrestrial wireless services which may not be compatible with MSS.¹⁰

⁸ TRW Comments, at 4; see also Orbcomm Comments, at 6-8; Starsys Comments, at 4-5.

⁹ See Motorola Comments, at 10. Construction of GLOBALSTAR has already commenced under a Section 319(d) waiver, and is now proceeding under LQP's recent authorization.

¹⁰ See id. at 4-5. GLOBALSTAR terminals will include a dual mode option which would give the user access to both cellular and MSS capabilities. By selecting this option, a GLOBALSTAR subscriber would have access to Enhanced 911 capabilities applied to cellular systems.

Fourth, MSS systems like GLOBALSTAR provide international service, and serve subscribers originating calls not only within but also outside the United States. LQP agrees that if any emergency service requirements are to be imposed upon global MSS systems, then they should be developed in an international forum which would allow the United States to take into account compatibility and consistency with international standards.¹¹ Coordinating emergency requirements with other countries would ensure that U.S. MSS licensees are not unduly burdened by a variety of requirements imposed by many different countries as well as the United States. LQP recommends that the Commission work in the ITU to develop and adopt uniform emergency procedures and protocols for global MSS systems.

In order to exempt MSS systems, the definition of categories of services subject to the Enhanced 911 compatibility requirements should be limited at least to "terrestrial mobile radio services offering access to real-time voice services provided on the public switched network."¹² After the first several LEO MSS

¹¹ See COMSAT Comments, at 8-9; Orbcomm Comments, at 8-9; Motorola Comments, at 11.

¹² See NPRM, at 18, ¶ 38. (By recommending a limitation to "terrestrial" services, LQP does not suggest that it is necessarily appropriate to apply the requirements to all terrestrial services.) The Commission proposed to exempt private mobile radio services which are not available to the public from the Enhanced 911 compatibility requirements. NPRM, at 19, ¶ 38. In LQP's Order and Authorization, it was granted private carrier status based on its proposed plan to provide MSS only on a contract basis to vendors who provide MSS capacity to subscribers and resellers. Order and Authorization, DA 95-128, ¶¶ 22, 28 (released Jan. 31, 1995). This "private carrier" exception would also exempt most MSS systems from the Enhanced 911 compatibility requirements.

systems have been launched and are operational, LQP recommends that the Commission seek counsel from an MSS industry advisory committee on whether and when MSS technology would support Enhanced 911 compatibility requirements.

II. AT THIS TIME, THE PUBLIC SHOULD OBTAIN ACCESS TO THE BENEFITS OF MSS WITHOUT THE SUBSTANTIAL COSTS AND DELAYS WHICH WOULD RESULT FROM IMPOSITION OF ENHANCED 911 COMPATIBILITY REQUIREMENTS.

The parties to this proceeding have demonstrated that emerging wireless technologies provide a diverse range of services and fill a variety of market niches. The NPRM proposes to require Enhanced 911 compatibility for many services without regard to these differences in character and markets. LQP submits that an overly rigid approach to Enhanced 911 compatibility may lose sight of the benefits of diversity in telecommunications services. On the one hand, the natural development of certain technologies may provide disparate "emergency" capabilities, all of which serve the public interest. And, on the other hand, consumers may desire a choice from an array of technologies with varying emergency service capabilities based on an individual consumer's needs and financial ability.

As Motorola points out, "Big LEO MSS service will offer a different mix of features and services from terrestrial wireless mobile communications developing

domestically within the United States."¹³ Through GLOBALSTAR and other Big LEO systems, the public will have access to a wide variety of services which can be used in emergencies, and which may not be available through terrestrial wireless services.¹⁴

For example, because MSS systems uplink to satellites rather than cell sites, fixed GLOBALSTAR user stations could be placed at sites throughout large natural reserves or along highways in remote areas where there is no landline or cellular telephone service. Each user station could be identified by number, marked on maps provided to visitors, and designed to connect directly to the nearest emergency station. The location of the caller could be easily identified by reading the station ID number. Similarly, when terrestrial telephone services are incapacitated due to a natural disaster, GLOBALSTAR terminals would continue to operate. In such situations, the user's location could generally be communicated by the user.

These useful emergency services are within the current capabilities of MSS systems, even though they may not be feasible through terrestrial wireless technologies. It is not necessary for the Commission to impose the full array of

¹³ Motorola Comments, at 11.

¹⁴ In the Big LEO Report and Order, 76 RR 2d 202, ¶ 196 (1994), the Commission noted that MSS systems have certain obligations with respect to maritime distress communications pursuant to Sections 321(b) and 359 of the Communications Act. 47 U.S.C. §§ 321(b), 359; see 47 C.F.R. § 25.143(f). However, it did not impose requirements for provision of search and rescue or emergency services on Big LEO systems.

Enhanced 911 requirements on MSS to make these useful services available to the public. Indeed, if the Commission were to impose the proposed Enhanced 911 compatibility requirements, the costs of MSS subscriber terminals may increase so dramatically that these uses may be priced out of the market and thereby become unavailable to remote locations.¹⁵

In short, the Commission should not attempt to homogenize all wireless systems at this time. The technologies and capabilities available in emerging technologies are different, and the services provided are distinct. But, all may be useful in their present form. The Commission should exploit this diversity by allowing new services to reach the public without imposition of costly technology which may not be appropriate for the stage of development of an individual service.

III. CONCLUSION

LQP recommends that the Commission not impose Enhanced 911 compatibility requirements on MSS systems at this time. The cellular model for these emergency services does not translate easily into the current MSS technology. However, the Commission should take steps now to facilitate introduction of appropriate emergency calling requirements on future MSS systems. First, the Commission should coordinate development of emergency

¹⁵ See Motorola Comments, at 11 ("it would be a sad irony if the ability of many people around the world to make even a simple emergency call were delayed in the interest of implementing enhanced E-911 capabilities in the United States").

calling protocols for international MSS systems through the ITU. Second, the Commission should seek counsel from an MSS industry advisory committee on the appropriate timing and feasibility of applying certain emergency requirements to future systems. In the meantime, the Commission should recognize that MSS systems can provide beneficial emergency services and promote their development so that such services will be available to the public in the shortest possible timeframe.

Respectfully submitted,

LORAL/QUALCOMM PARTNERSHIP, L.P.

By: John T. Scott, III
John T. Scott, III
William D. Wallace
CROWELL & MORING
1001 Pennsylvania Avenue, N.W.
Washington, DC 20554
(202) 624-2500

Leslie A. Taylor, JTS
Leslie A. Taylor
LESLIE TAYLOR ASSOCIATES
6800 Carlynn Court
Bethesda, MD 20817
(301) 229-9341

Date: March 17, 1995